



## A3 Recommendations for Online Avalanche Education

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### A3's role in the avalanche education in the US:

American Avalanche Association (A3) is dedicated to professional excellence in avalanche education and provides guidelines for all levels of avalanche education in the US. These guidelines strive to ensure programmatic quality, consistency, and up-to-date content for avalanche training. A3 does not offer avalanche courses, but it approves course providers whose curriculum aligns with A3 guidelines. For Recreational avalanche education, A3 is not a certifying body; A3 does not accredit programs or provide certifications for individuals. For Professional avalanche education, A3 approves the course providers and oversees the course standards and the content delivery.

### Purpose of online recommendations:

The exponential growth of online education has changed the landscape of avalanche education. While it makes the content accessible to more people, it has altered the length and intensity of traditional avalanche courses. The experiences gained during the 2020-21 season allow A3 to create recommendations for avalanche education delivered in online settings. Online education will most likely continue to be a common delivery method on avalanche courses.

### Online education definitions and examples:

**Online education** can be divided into synchronous (learning happens at the same time for all the participants) and asynchronous (participants engage in learning at different times) education. **Blended** or **hybrid education** can refer to courses that utilize both online and in-person (face to face) instruction or to online education that utilizes both synchronous and asynchronous instruction.

#### Examples of Synchronous instruction:

- Live class meetings in Zoom or similar
- Small group meetings in Zoom or similar
- Moderated online study groups
- Online office hours

#### Examples of Asynchronous instruction:

- Recorded video lectures
- Recorded interviews with experts
- Moderated discussion boards
- Assigned public video materials (TED Talks, YouTube etc)
- Homework assignments



Simply providing access to instructional content, such as video lectures or curated list of websites does not automatically equate to instruction. *It is the course provider's responsibility to create an educational structure that gives students the adequate opportunity to understand and apply the materials provided with measurable individual learning outcomes.* For example, students can first watch an online lecture, then apply knowledge in an online home assignment, and finally measure their learning success by completing an online quiz. Regardless of the online delivery method, the providers are encouraged to design the content with active student engagement in mind. When engaged, students make a personal investment in the learning; often successful activities are connected with a high level of individual arousal and energy input. Incorporating quizzes will give students feedback on their progress and improve their readiness for field learning.

#### Examples of Student engagement activities

- Online quizzes
- Online scavenger hunts
- Online student discussion boards or chat rooms monitored by an instructor
- Online homework assignments completed individually or in small groups
- Collaborative annotations of learning materials
- Interactive video vignettes
- Structured use of social media platforms for learning activities

#### **Online recommendations for each course type:**

In-person lecture instruction can be replaced with an equivalent number of hours of student engagement online (synchronous or asynchronous). Student engagement hours are based on the amount of time a person would take to complete the learning activity such as watching a video, reading an article, taking a quiz, or completing a homework assignment.

While the majority of Rescue, L1 and L2 content can take place in the field, some component of didactic instruction is required whether that happens indoors or outside. Instructors must ensure that students receive sufficient instruction in order to meaningfully learn and participate in field lessons. This likely means that additional synchronous or asynchronous instruction, appropriate to the content being taught, is required. *Content comprehension and knowledge quizzes are strongly encouraged.*



### **Avalanche awareness**

- The whole content can be delivered as an online course.

### **Rescue**

- All the course content specified in A3 guidelines needs to be delivered to the participants.
- Online components can replace all the lecture content. This equates to 3 hours of engagement by an average student, if using online curriculum to support the field day.
- Course needs a minimum of 5 hours of field time.
- All the content can be taught in the field.

### **Level 1 and Level 2**

- All the course content specified in A3 guidelines needs to be delivered to the participants.
- Online components can replace all the lecture content. This equates to 8 hours of engagement by an average student, if using online curriculum to support the field day.
- Daily briefings and debriefings can be done in the classroom, in a synchronous online setting or in the field.
- Course needs a minimum 14.5 hours of field time (60% of the 24 hour course). This equals two 7-8 hour field days.